DOCUMENT RESUME

ED 123 120 88 SE 020 863

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TITLE Making Nutrition Education Count: A Guide for Nutrition Education K-6. Grade 3.
INSTITUTION Clay County Vocational Cooperative Center, Moorhead, Minn.; Minnesota State Dept. of Education, St. Paul. Div. of Vocational and Technical Education.
SPONS AGENCY Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.
PUB DATE Jul 75
NOTE 39p.; Some colored pages; For related guides grades K-6, see SE 020 860-866; Best copy available

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage
DESCRIPTORS Consumer Education; *Curriculum Guides; *Elementary Education; *Food; Grade 3; *Health Education; *Nutrition; Science Education
IDENTIFIERS Elementary Secondary Education Act Title III; ESEA Title III

ABSTRACT

This curriculum guide for nutrition education grade 3, was designed to incorporate knowledge of thirteen concepts into the child's decision-making processes as a food consumer. These concepts, as covered by the guide, are: affecting bodily well-being through nutrition; affecting dental health through nutrition; models for diet selection; controlling bacterial growth in foods; how to keep foods safe temporarily; treating foods to prolong safe usage; ethnic food traditions; family food customs; effects of peer influence on food habits; effects of advertising on food choices; supply of money affects food choices; accessibility of food affects food choices; preparing foods in different ways. Each concept is taught in one lesson which can usually be accomplished in about a half hour. Careers in health and food production are also identified. Each lesson involves an activity using oral communication skills and sometimes illustrative, dramatic, or written skills. Several duplication masters are included. (RE)

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Making Nutrition Education Count A Guide for Nutrition Education K-6

JULY 1975

Prepared by Patricia Kratky, R.D. and Lois Haigh with assistance in development of the curriculum format from LaVonne Elsbernd.

The curriculum has been developed as a Pilot Project with funds provided by the Minnesota State Department of Vocational Education under the direction of Audrey Grote, Vocational Program Supervisor, Consumer-Homemaking, in cooperation with the Clay County Vocational Cooperative Center. The project administrator was Melvin O. Salberg.

CLAY COUNTY VOCATIONAL COOPERATIVE CENTER
2323-16 Avenue South, Moorhead, MN 56560

We wish to thank the K-3 teachers in Barnesville, Dilworth, Glyndon-Felton and Hawley elementary schools for their consideration and help during the testing period for the project.

Special thanks are extended to Thomas Sandhei, principal, and the faculty at Sharp Elementary school in Moorhead for their time and effort in teaching these lessons as a part of the testing process.

Many suggestions from all of these teachers have been incorporated into the lessons contained in this curriculum.

When duplicating these materials please give credit to Clay County Vocational Cooperative Center and the authors -- Thank you.

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MAKING NUTRITION EDUCATION COUNT

Only a half century ago, the science of nutrition was born in test tubes and animal experiments. Early knowledge demonstrated the effect of nutrition on health with remarkable clarity. Recent research has expanded the consequences of inadequate nutrition. Using recent accurate information to influence personal habits demands that the information be presented to every individual in an understandable and meaningful manner.

An infant's eating patterns becomes the adult's eating habits. The longer an imperfect pattern is continued, the more difficult it becomes to incorporate accurate information into the pattern. Helping the *elementary* student to incorporate accurate nutrition information into his life style becomes the goal of nutrition education.

Today's child has significant control over his eating pattern. Breakfast foods are often chosen by children. Family values toward sleep and family schedules may force the child to prepare breakfast for himself. Pocket money is often spent for self-selected snacks and meals. Some children prepare meals when the pressure of family schedules allow only individual sandwich meals. Nutrition education must influence these existing areas of decision for children to be meaningful to them.

WHAT IS NEEDED

Many factors influence an individual's dietary decisions. Thirteen of these factors were included in the concepts for this curriculum. While the concepts are related to each other, a given progression is not necessary to build to the final decision-making skill. The concepts follow groupings: affecting the health of the individual, the individual's social background and the individual's personal resources.

CONCEPTS AFFECTING THE HEALTH OF THE INDIVIDUAL

Affecting bodily well-being through nutrition
Affecting dental health through nutrition
Models for diet selection
Controlling bacterial growth in foods
How to keep foods safe temporarily
Treating foods to prolong safe usage

CONCEPTS AFFECTED BY SOCIAL BACKGROUND

Ethnic food traditions
Family food customs
Effects of peer influence on food habits
Effects of advertising on food choices

CONCEPTS AFFECTING PERSONAL RESOURCES

Supply of money affects food choices.
Accessibility of food affects food choices
Preparing food in different ways

HOW TO FIT IT IN

Each concept is taught in one lesson which usually is finished in slightly more than one half hour. More than one concept is taught in some lessons. The primary grades develop awareness in each of the factors influencing nutrition. The upper elementary grades apply and strengthen this awareness.

Concepts affecting health integrate into existing curricula for health and science. Careers in health and food production are also identified.

Each grade level has a different set of activities designed for that grade level's interests and traditional activities. Each activity builds upon skills gained in the preceding grade's activity for that concept. These are exemplary lessons and may need to be adapted for use in a specific classroom.

Each lesson involves an activity. All activities involve oral communication skills. Some activities use illustrative, dramatic, or written skills. The skill required by the activity depends upon the students level of knowledge.

SYMBOLS

Each lesson plan uses symbols to indicate

materials needed

reference materials for student use -- books in large italic capitals -- films, filmstrips, pamphlets in italic.

outline of teaching procedure

outline of student activities

BACKGROUND INFORMATION for the teacher's use and RECIPES are included when necessary.

EQUIPMENT

Each school should make available to every classroom upon need:

dish sponge
mild detergent
wax paper
several sets of graduated measuring cups and spoons
liquid measuring cups
paper towels
large bowl (4 quart)
small bowl (2 quart)
large stirring spoon
covered pitchers
rubber scrapers
hot pads
electric fry pan or selection of covered saucepans and hot plate
manual can openers
disposable dishes and silver as needed
laminated National Dairy Council Food Models

Other equipment will be needed as each lesson indicates.

Plans for a portable mini-kitchen will be available after January 1, 1976.

GRADE 3

LESSON CONCEPT	PAGE NUMBER
Affecting dental health through nutrition	3-1
Models for diet selection	3-4
Affecting bodily well-being through nutrition	3-7
Storing preserved foods	3-15
Supply of money affects food choices	3-17
Controlling bacterial growth in foods	3-19
Effect of peer influence and ethnic background on food habits	3-22
Effect of advertising on food choices	3-23
Preparing foods in different ways	3-25
Family food traditions	3-27
Accessibility of food affects food choices	3-29

CONCEPT: Affecting dental health through nutrition

GENERALIZATION: Snacks that have no sugar added are less likely to contribute to tooth decay.

BEHAVIORAL OBJECTIVE: The student will identify low sugar snacks.

* * * * * * * * * * * * * * * * * * * *

--Script for play Toothbrush Helpers (attached)
Materials for Toothbrush Helper mobile or bulletin board
Foods to Help Keep Your Teeth Cavity Free (attached)

--*"Jane and Jimmy Learn About Fresh Fruits and Vegetables"*
United Fresh Fruit and Vegetable Association
777 Fourteenth Street, N.W.
Washington, D.C. 20036

"Learning About Your Oral Health -- Level I"
American Dental Association
211 East Chicago Avenue
Chicago, IL 60611

--Duplicate copies of puzzle for each student. Direct students in presenting play Toothbrush Helpers. Simple costumes or name signs can be used.

After watching the play, talk with the students about it. Make sure that they understand that BRUSHING teeth is the BEST way to help prevent cavities. Choosing snack foods that are low in sugar can help reduce the number of cavities.

--Present play Toothbrush Helpers.
Do Foods to Help Keep Your Teeth Cavity Free puzzle.

ADDITIONAL ACTIVITY: Make a mobile or bulletin board using the foods in the puzzle to help keep your teeth clean.

BACKGROUND INFORMATION

Answers to Foods to Help Keep Your Teeth Cavity Free puzzle

ACROSS

1. Popcorn
2. Water
3. Strawberries
4. Carrot
5. Peanuts

DOWN

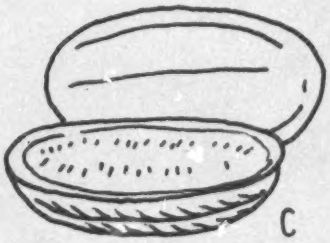
A. Cherries
B. Oranges
C. Watermelon
D. Radishes
E. Celery
F. Cauliflower

FOODS TO HELP KEEP YOUR TEETH CAVITY FREE

DOWN

A

B

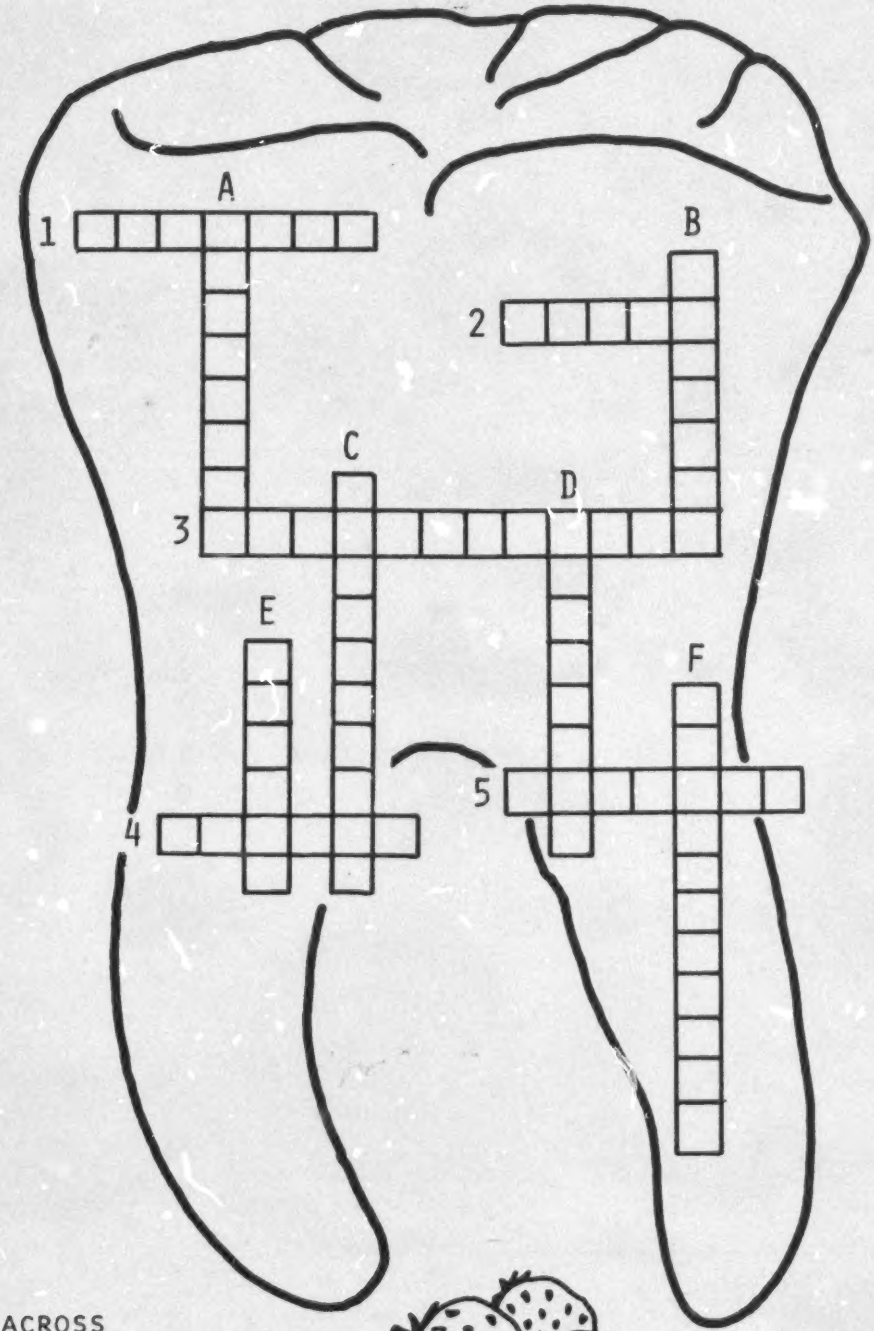


C

D

E

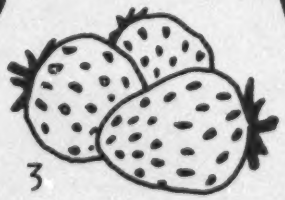
F



ACROSS

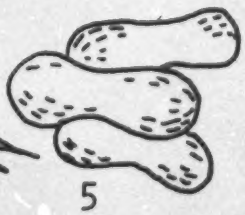
1

2



3

4



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TOOTHBRUSH HELPERS

CHARACTERS: Narrator I
Narrator II
Mr. Tooth
Tony Toothbrush
Sugar Foods -- Pop, Candy, and Bubble Gum
Toothbrush Helpers -- Carrot, Apple, and Celery

* * * * * * * * * * * * * *

Narrator I Have you ever heard of toothbrush helpers? Well this play is about toothbrush helpers. First there's Mr. Tooth.

Narrator II He is very important to us when we eat and he makes a smile "Happier!"

Narrator I It's important to take good care of him because he must last a whole lifetime.

Narrator II Here's Tony Toothbrush.

Narrator I Tony Toothbrush helps Mr. Tooth keep clean. Mr. Tooth likes to see Tony very often. You know how dirty a tooth can feel after eating, so Mr. Tooth welcomes Tony very much and especially after he eats sugar foods.

Narrator II Speaking of sugar foods, here comes Pop, Candy, and their friend Bubble Gum. They aren't friends of Mr. Tooth because they're sugar, and sugar can get on Mr. Tooth's surface and eat away at him. It really hurts Mr. Tooth when the sugar from Pop, Candy, and Bubble Gum are decaying his head.

Narrator I Mr. Tooth is especially afraid of these sugary characters today because Tony Toothbrush is going on a vacation. Mr. Tooth can already feel the pain from the attack of the sugar foods. Oh, if only Tony Toothbrush could stick around for half an hour then he could brush away those sticky bad guys before they decay Mr. Tooth's head.

Narrator II Mr. Tooth -- I think we can save you from those "bad guys." (Enter Apple, Carrot, Celery.)

Narrator I Why, here are the "good guys." I wonder what they can do to help Mr. Tooth.

Narrator II Carrot, Celery, and Apple are friends of Tony Toothbrush they know they can help him out while he is on vacation. They are not sweet and sticky and when they are eaten they help keep teeth clean.

Narrator I Yes, that's right, they help keep the teeth clean so when Tony Toothbrush is on vacation, Mr. Tooth won't need to worry quite so much about attacks by those "bad guys" -- the sugar foods.

Narrator II Now those of you who had never heard of toothbrush helpers can see that eating low sugar snacks can help keep your teeth healthy.

CONCEPT: Models for diet selection

GENERALIZATION: A nourishing diet can be selected by choosing foods from the four food groups.

BEHAVIORAL OBJECTIVE: The student will place selected foods from each food group into the correct group.

* * * * * * * * * * * * * * * * * * * *

--Paper tablecloth divided into quarters
Food models or food pictures
A ruler or stick with string tied to it and a magnet on the end of the string
Paper fish (attached)
Paper clips

--*Food Models -- Teacher Guide*
National Dairy Council
111 North Canal Street
Chicago, IL 60606

"Everyday Eat the 1-2-3-4 Way" (poster)
National Dairy Council
111 North Canal Street
Chicago, IL 60606

"The Great Food Show" (film -- free loan)
Modern Talking Pictures Service
9129 Lyndale Avenue South
Minneapolis, MN 55420

--Duplicate fish. Attach selected food models to each of fish with paper clips.

Group the fish food side down. Spread the table cloth. Label each quarter with the name of a food group: Milk Group, Meat Group, Fruit and Vegetable Group, and Bread and Cereal Group. Direct the students in fishing and placing foods correctly in food groups.

The Dairy Council food models include foods which do not belong in any of the food groups, e.g. jelly, salad dressing, butter, jello, sugar, soft drinks. Some of the foods can be placed in more than one group, e.g. pizza, tacos, spaghetti, stew, cream of tomato soup.

--Fish for a food. Place the food correctly in one of the four groups on the tablecloth.

SUGGESTED FOODS FOR "FISH" GAME

MILK GROUP

- milk
- evaporated milk
- buttermilk
- powdered milk
- ice cream
- cocoa
- cream
- milk shake
- cheese
- pudding

MEAT GROUP

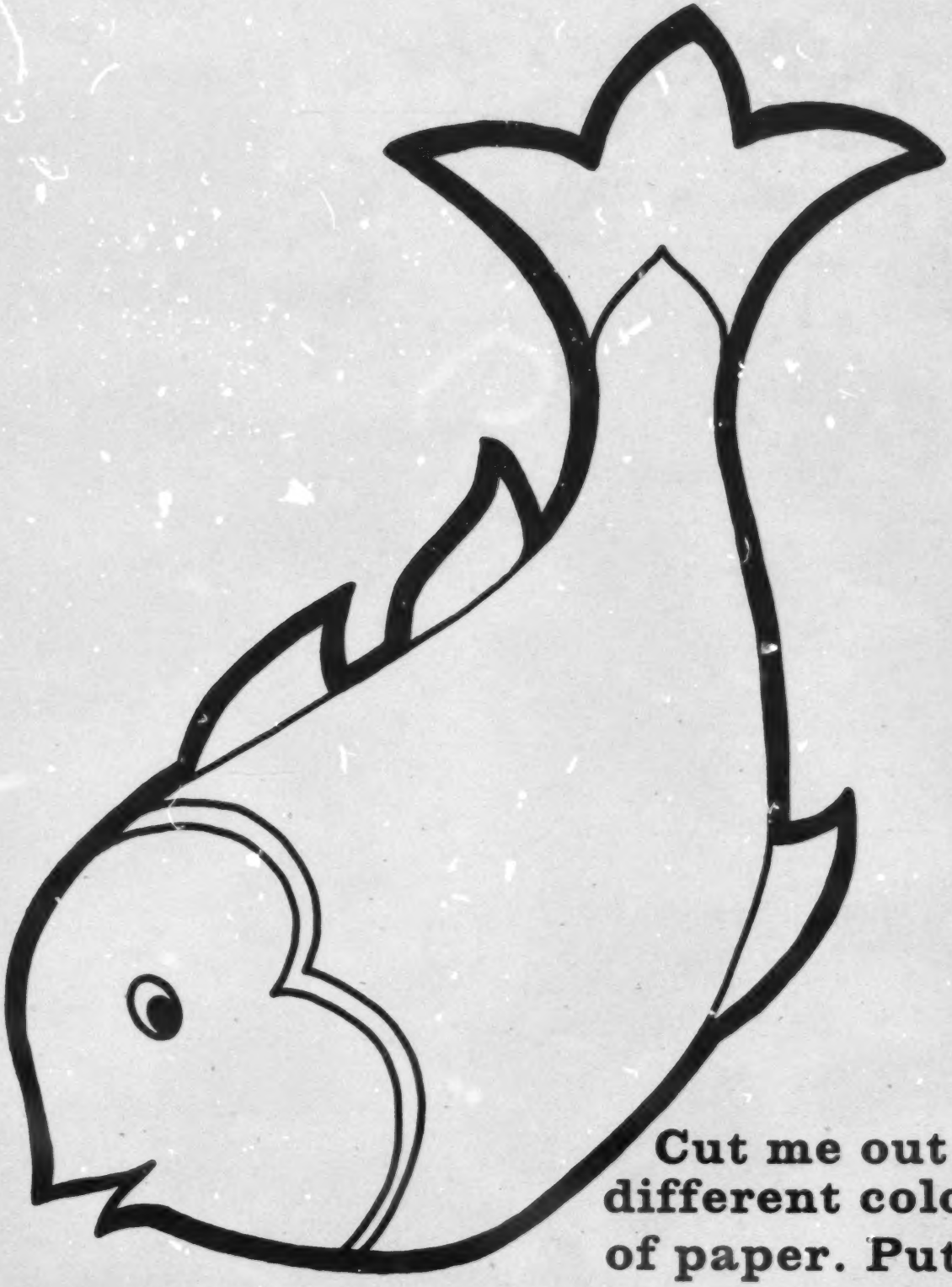
- poultry
- beef
- chili con carne/with beans
- beef stew
- nuts
- peanut butter
- fish
- shell fish
- soybeans
- shrimp
- refried beans
- liver
- pork

FRUIT AND VEGETABLE GROUP

- any fruit or vegetable

BREAD AND CEREAL GROUP

- bread -- any kind
- muffins
- fruit breads
- baking powder biscuits
- breadcrumbs
- sweet rolls
- dinner rolls
- pancake
- waffles
- popover
- cereals
- rice
- popcorn
- macaroni
- crackers
- cookies
- pretzels
- corn meal
- flours
- chow mein noodles
- noodles
- spaghetti



Cut me out of different colors of paper. Put a picture of food on my tummy.

CONCEPT: Affecting bodily well-being through nutrition

GENERALIZATION: The energy needed for bodily activity is provided by ergy obtained from food.

BEHAVIORAL OBJECTIVE: The student will match units of food energy with various physical activities by playing the Energy Game.

* *

--Cards reproduced from sample included

--*WHAT HAPPENS TO A HAMBURGER*
Paul Showers
Thomas A. Crawell Co.
New York, NY

--Teach students to play the Energy Game. (Instructions included with game.)

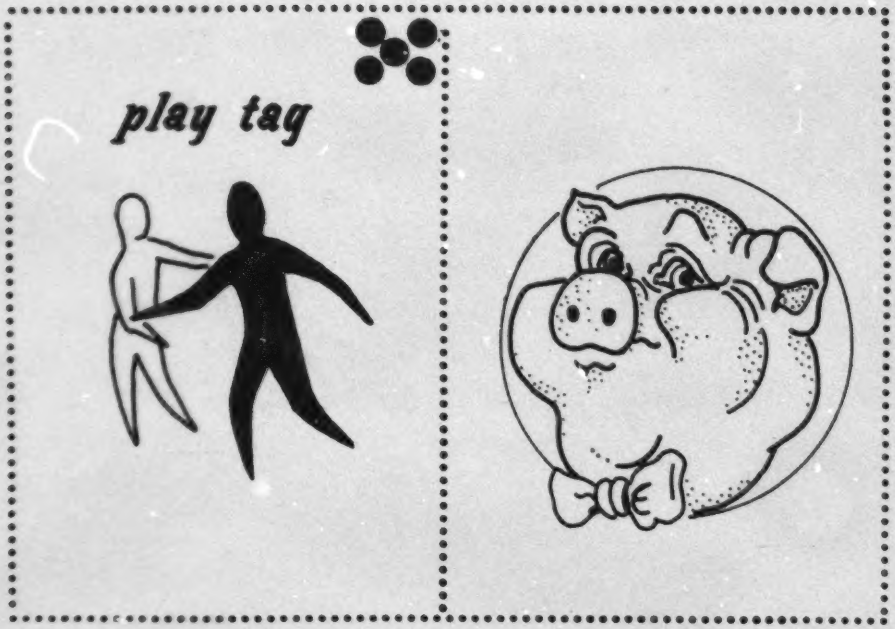
Lead the students to understand that food supplies energy for bodily activity. The more vigorous the activity, the more energy the body must obtain from food.

Foods containing fat or sugar have a lot of calories. Each dot represents approximately 40 calories.

Which activities use the most energy; the least energy? Which activities have the students participated in? Which foods have the students eaten? If foods and activities of equal value are not matched, what foods might supply the energy needed for an activity?

--Play Energy Game.

ADDITIONAL ACTIVITY: Plan a menu to supply the energy for an afternoon's activity. Use the foods from the Energy Game cards.



DIRECTIONS FOR PLAYING THE ENERGY GAME

GETTING READY

The deck contains 55 cards. There may be 2 to 7 players. Shuffle the deck.

PLAYING

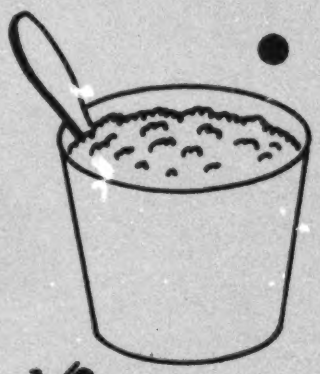
Deal all the cards face down. Sort them into matching pairs. A pair is an activity card and a food card each having the same amounts of energy. The activity card gives the amount of energy used during one hour of that activity.

Each player lays all matching pairs on the table in a row face up starting with the highest energy cards. The cards with the least energy are placed last in the rows.

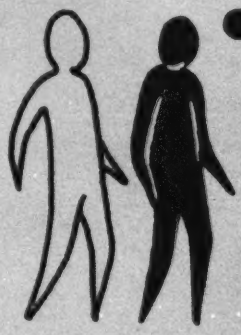
Each player in turn draws a card from the player on the right. If the card drawn matches a card in the hand, lay the pair on the table face up as before. Everytime a pair is laid down the player tells the name of the food and the matching energy. Continue to draw cards until one player has no cards left in the hand.

WINNING

The first player to lay down all the cards wins. The loser is the player with the "pig" card left in his hand.

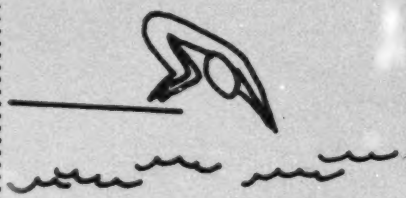


1/2 cup
cottage cheese



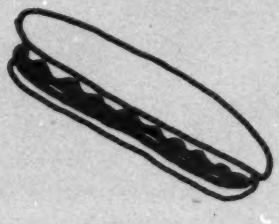
walking

jump rope

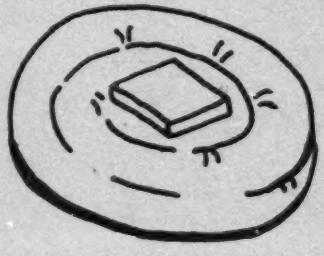


swimming

babysitting
a 2 year old



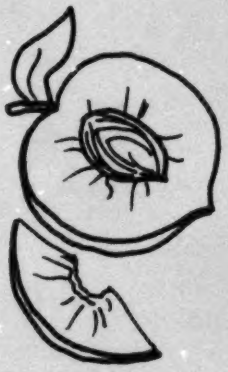
1 weiner & bun



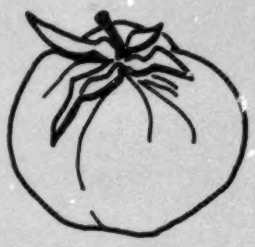
1 sweet roll
& butter

1/2 cup ice cream

1 cup green beans

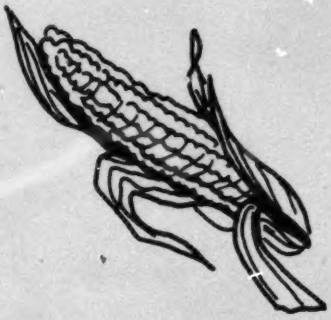


1/2 cup peaches



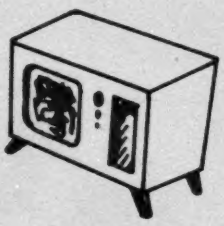
1 small tomato

1/2 carrot

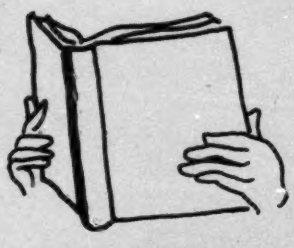


1/4 cup corn

1/2 cup beets



watching T V

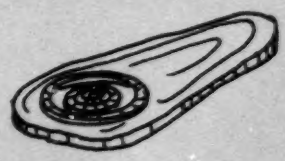


reading

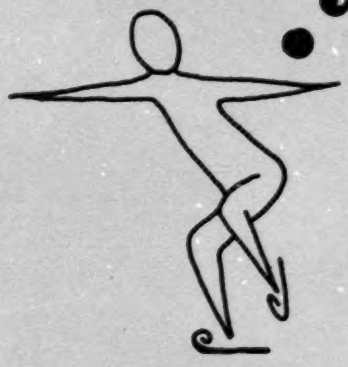
1/2 grapefruit

3/4 cup

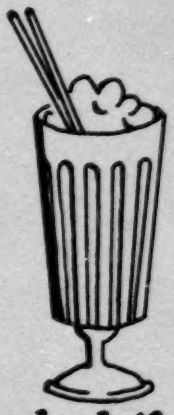
2 tablespoons



2 oz. beef liver

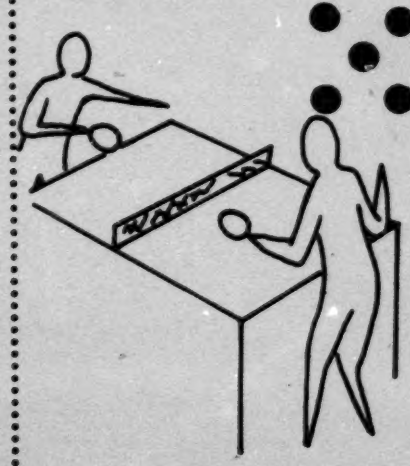


skating

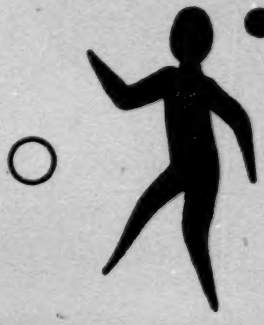


1 1/4 cups chocolate milkshake

3 oz. hamburger

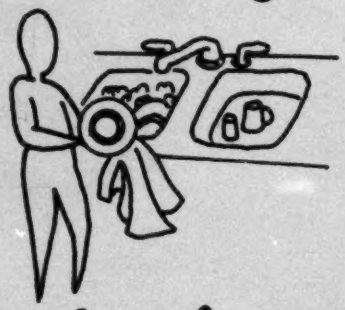


ping-pong

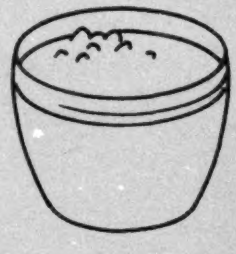


kickball

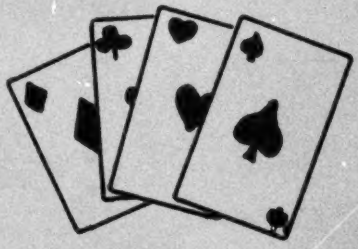
softball



washing &
drying dishes



3/4 cup
baked custard

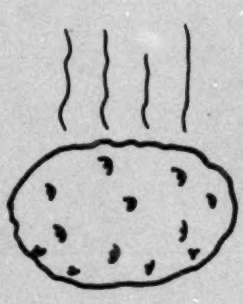


playing cards

bicycling

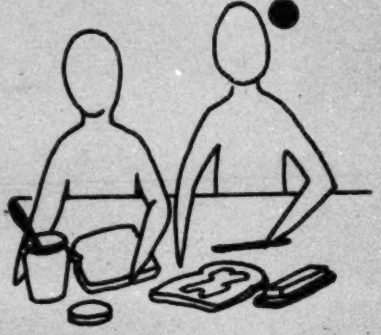
picking up
your room

getting ready
for school

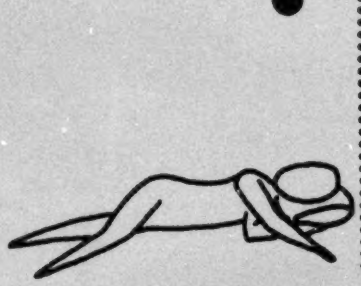


baked potato

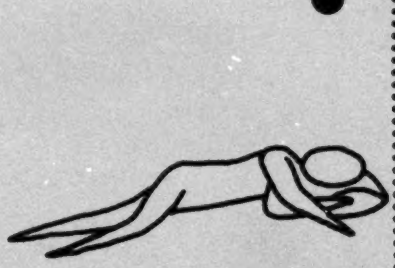
riding a
mini bike



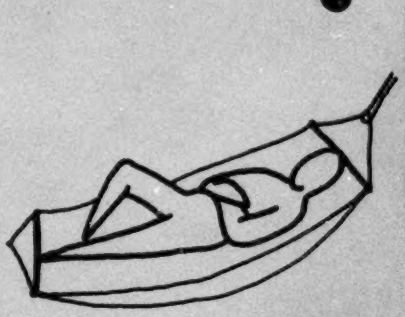
making a snack



sleeping



sleeping

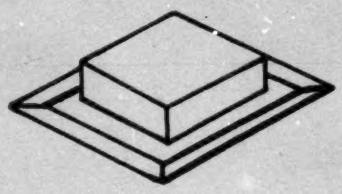


resting

sleeping

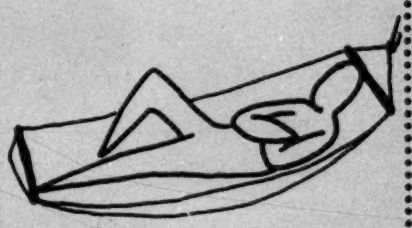
sleeping

resting

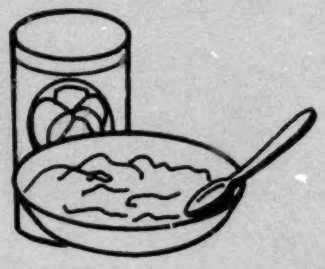


1 teaspoon butter

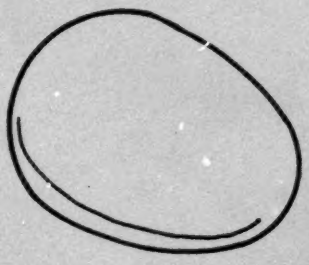
sleeping



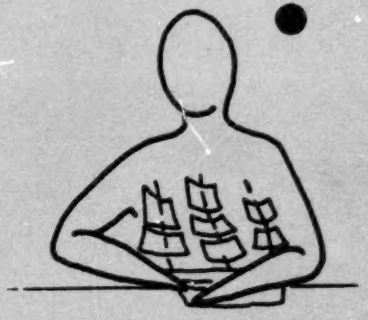
resting



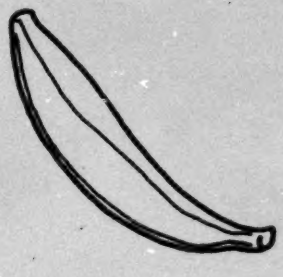
1/2 cup oatmeal



1 egg

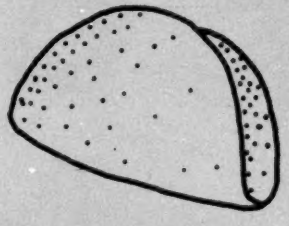


making models

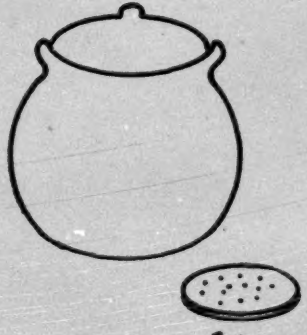


1 small banana

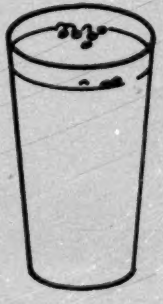
6oz. soda pop



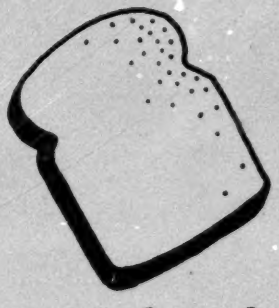
1 tortilla



1 sugar cookie



1 cup skim milk



1 slice white bread

CONCEPT: Storing preserved foods

GENERALIZATION: Preserved foods can be stored for longer periods than fresh foods assuring a food supply thoughout the year.

BEHAVIORAL OBJECTIVE: Choose the conditions suitable for storing preserved foods.

* * * * * * * * * * * * * * * * * * *

--A selection of preserved foods:

canned foods	dried foods	pickled vegetables
frozen foods	waxed foods	pickled fish
freeze-dried foods	pickled fruits	smoked fish
smoked meat	smoked poultry	

--*"Pioneer Living: Preparing Foods"* (film)
Extension Service, University of Minnesota
2037 University Avenue
Minneapolis, MN 55455

"California Prunes" (film)
Modern Talking Pictures Service
9129 Lyndale Avenue South
Minneapolis, MN 55420

--Assemble a variety of preserved foods. Ask the students to name as many preserved foods as they can.

Show the students the foods you've assembled. Let them examine them. Tell them to observe the color, smell, and flavor. Ask in what ways preservation has changed the foods.

Where would you store these foods at home?

Direct students in making a kitchen floor plan showing storage areas for foods observed.

--Examine the collection of preserved foods.
Name other foods which have been preserved.
Talk about occasions when fresh foods may not be available (camping, seasonal, astronauts, disasters).
Draw floor plan of a kitchen showing where to store the foods examined.

ADDITIONAL ACTIVITY: Reconstitute some dried foods. Learn about some of the foods preserved and the methods of preservation used by pioneers, Eskimos, Indians, others.

BACKGROUND INFORMATION ON FOOD PRESERVATION

Preserving foods means stopping or slowing the growth of micro-organisms found on food. It can be done by removal of one of the things that these organisms need to live: air, moisture, or nutrients. The micro-organisms may be killed by heat, or growth may be slowed by the lowering of temperatures.

Drying foods is probably the oldest method. By lowering the water content of foods growth of micro-organisms can be stopped. Ultra violet or sunlight is used to keep surfaces of food sterile. Ultra violet light destroys bacterial growth. Drying foods outside in the air is best done on sunny days. Freeze-drying of foods slows bacterial growth by lowering the temperature of the food to -10^{o} F. very rapidly and creating a partial vacuum to draw off the moisture quickly. The bacterial growth is halted and some spores are destroyed. Dried foods are best stored in a sealed container on a shelf.

Salting and pickling foods preserves by drawing off moisture and raising the acidity of the food. The more acid a food is, the less likely that micro-organism growth will be supported. Some organisms are more tolerant to extremes in acidity and alkalinity and survive in dormant stage.

Canning foods controls bacterial growth, destroying bacteria and spores by heating to a high temperature for a given length of time. Sometimes flours and starches added to foods are modified so that the heat is transmitted more evenly and all parts of the food are heated. Store canned foods on a cool shelf.

Smoking foods is a form of drying. Smoking adds flavor that permeates the food. Care must be taken to keep the temperature of the food above 140^{o} F. during smoking or micro-organism growth will be rampant. Most smoked foods should be stored in the refrigerator.

Some foods can be stored longer by sealing in paraffin. This does not stop micro-organism growth, only seals the air from the surface of the foods. Waxed foods keep much longer if stored at 40^{o} F.

Freezing foods is a long-term storage method. The bacteria in food that causes it to spoil is not destroyed by 0^{o} F. The organisms become inactive at this temperature. Frozen foods should not be stored longer than 6 to 12 months. Storing them above 0^{o} F. shortens the time their quality will be maintained.

CONCEPT: Supply of money affects food choices

GENERALIZATION: Food habits of individuals change as a result of indirect influences.

BEHAVIORAL OBJECTIVE: When given two sums of money, the student will purchase snacks from a selected list and give reasons for the decisions they made.

* *

--Snack List worksheet (attached)
Real money, paper coins, or other substitute for money
An envelope for each student's money
Empty snack food packages with prices shown

--Duplicate Snack List worksheet.

Set snacks out in store fashion. Give each student an envelope with money for shopping. Tell the students they are to shop for snacks with all or part of the 35 cents. They will write their choices on the Snack List worksheet.

Repeat shopping experience with 75 cents.

Have the students compare their two lists and be ready to explain what influenced their choices of snacks.

Do you have some of the same foods on each list? Did you spend all of your money the first time? ...the second time? If not, why?

Direct students in placing the selected snacks into the four food groups, plus a group for other foods.

--Choose snacks.
Make decisions on spending snack money.
Sort snacks into four food groups.

SNACK LIST 1

NAME OF FOOD	PRICE
ALTOGETHER I SPENT	
I HAVE LEFT	

SNACK LIST 2

NAME OF FOOD	PRICE
ALTOGETHER I SPENT	
I HAVE LEFT	

CONCEPT: Controlling bacterial growth in foods

GENERALIZATION: In many instances bacteria is responsible for contamination of food.

BEHAVIORAL OBJECTIVE: The students will expose sterile petri dishes to bacteria and note the number, color, and odor of bacteria growing on them.

* * * * * * * * * * * * * * * * * * * *

--Five filled disposible petri dishes
"Watching Bacteria Grow" chart (attached)

Sterile swabs or tongue depressors

--*"How Bacteria Grow: Home Economics Guide"*
Food and Nutrition
Cooperative Extension Service
University of Missouri
Columbia, MO 65201

--Duplicate "Watching Bacteria Grow" chart.

Obtain five sterile petri dishes. Petri dishes or plates are low, covered glass or plastic containers filled with a sterile gel. The ingredients used to make the gels vary according to the types of bacteria to be grown. Blood gel will grow a wide variety of bacteria. They can be purchased at hospital supply stores, the high school or college science departments and medical laboratories. *"How Bacteria Grow: Home Economics Guide"* gives directions on how to make them.

Lead a class discussion on bacteria. Ask students what they think happens when dirty food is eaten.

Discuss what makes things dirty? Define sterile (free from germs). Ask students where they think bacteria grow. Direct the students in exposing petri dishes to bacteria. Use a sterile swab or tongue depressor to touch the gel on the petri dishes. Take the bacteria from four places suggested by the students. The fifth petri dish will be left unexposed as a control.

Explain procedure for observing and recording bacterial growth on "Watching Bacteria Grow" chart. A "colony" is an isolated spot consisting of a large number of bacteria.

Label each petri dish with the place from which bacteria was obtained. Seal plates. Put in a warm dark place. Aid students in observing and recording bacterial growth daily for one week.

--Decide four places where bacteria would grow best.
Expose petri dishes to each place and seal.
Incubate dishes in a warm dark place.
Use the chart to record daily the amounts of bacterial growth from each place for one week.

ADDITIONAL ACTIVITY: Arrange for a field trip to a medical laboratory or invite a medical technologist or technician to class to explain the services provided in medical laboratories.

BACKGROUND INFORMATION

Bacterial Food Poisoning And Infection

Name of illness	Causative agent	Common food involved	How foods are contaminated	Preventive measures
Food poisoning Staphylococcus	Poison develops when certain kinds of Staphylococcus germs grow and produce their toxin in food.	Cooked ham–chicken a la king-other meats–cream filled pastries and other desserts made of dairy products–potato salad-chicken, fish, and other meat salads. Hollandaise sauce.	Nearly always by food handlers-from boils, pimples, infected cuts or scratches-droplets from nose or mouth.	Keep foods hot (150°F or above) or cold (40°F or lower). Cool or heat rapidly between these temperatures. Use hands in food only when necessary. Healthy food handlers.
Food infection Salmonella	Many types of these germs produce illness in man. These germs are found in urine, and or feces of man, dogs, cats, rats, mice, poultry, turtles, etc.	Meat, poultry, eggs, egg products, custards, shell fish, soups, gravies, raw vegetables, sauces, "warmed-over" foods.	Fecal contamination by food handlers. Raw contaminated food or water. Food handlers and other carriers.	Strict personal cleanliness and habits among food handlers. Sufficient cooking and rapid refrigeration of perishable food. Good insect and rodent control.
Food poisoning Perfringens	Clostridium Perfringens germs grow rapidly under favorable conditions.	Meat which has been boiled, steamed, braized, or partially roasted and allowed to cool slowly at room temperature. Served cool or reheated.	Meat contaminated after slaughter, during processing, transportation and handling.	Keep food hot or cold. Refrigerate or heat rapidly between 150°F and 40°F.
Food poisoning Botulinus	Poison develops when Clostridium Botulinum germs grow in food. They grow without air. Poison usually fatal.	Improperly processed or unrefrigerated foods of low acid content.	Soil and dirt. Spores are not killed in underheated foods.	Use only commercially prepared food. Discard all cans or jars of food that leak. Bulged cans and food with off odors in freshly opened containers should be discarded.
Streptococcus food infection and Streptococcus infection. Beta type (Strep throat) and Alpha type (Intestinal)	Beta hemolytic Streptococci and Enterococcus and Pyogenic group.	Food contaminated with nasal and oral discharges from persons with active cases or by carriers---and food contaminated with feces on unclean hands.	Coughing, sneezing, droplet infection, or insanitary food handling.	Exclude food handlers with known Strep infections. Adequate heating and proper refrigeration of food.

Minneapolis Health Department

Watching Bacteria Grow Chart

Month and Day	Kind of Plate	Number Colonies	Color	Smell
	Untouched			

CONCEPT: Effect of peer influence and ethnic background on food habits

GENERALIZATION: When peer groups share in the observance of ethnic mealtime traditions, an enjoyable experience results.

BEHAVIORAL OBJECTIVE: The student will cooperate in the planning and operation of an Italian restaurant.

* *

--Arrange a date with school lunch cook when Italian spaghetti will be served. If possible, expand the menu to include an Italian salad, bread sticks, and ice cream (Spumoni is the Italian ice cream.)

--*I WANT TO BE A WAITRESS*
Eugene Baker
Children's Press
Chicago, IL

I WANT TO BE A RESTAURANT OWNER
Carla Greene
Children's Press
Chicago, IL

--Tell the students they will be turning the classroom into an Italian restaurant for lunch one day. In order to do this it will first be necessary to plan carefully. Tell them cooperation on the part of everyone is absolutely necessary.

After completion of planning discuss with the students the kind of an atmosphere they will want to create in their restaurant. Talk about table manners -- be sure to include courtesy, consideration of others, conversation topics that are pleasant, quiet voices, relaxed atmosphere, and decorations.

Assign the roles the students will take in planning and operating the restuarant:

Manager and assistant
Chef and assistant
Waitress and waiters
Bus persons
Cashier
Dishwashers
Host -- hostess

Help the students define the duties of each position. Ask students to decide on a guest to invite to the restaurant.

--Plan an Italian restaurant.
Discuss duties and roles of restaurant personnel.
Discuss behavior expected of all participants.
Invite guest to lunch at Italian restaurant.

CONCEPT: Effect of advertising on food choices

GENERALIZATION: Food advertisements on radio and television influence the food selected by the people these media reach.

BEHAVIORAL OBJECTIVE: The student will determine whether familiar food slogans sell foods from the four food groups or other foods.

* * * * * * * * * * * * * * * * * * * *

--Three slips of paper per child
Box to collect slips of paper

--Divide the class into two teams. Read the slogans to the teams. They answer with the name of the food the slogan advertises. If the team answers correctly, they keep the card. If they answer incorrectly, the other team has a chance to answer. The team with the most slogan cards wins.

Follow the game by having the students sort their slogan cards into the four food groups and "other" foods. Which food is most frequently advertised? How does that influence what you think is a good food?

--Participate in a game of slogans.
Discuss influences of advertising on food choices.

SUGGESTIONS FOR ADVERTISING SLOGANS

"Things Go Better With....." -- Coke
"It's the Real Thing." -- Coke
"You've Got a Lot to Give." -- Pepsi
"It's the .... Generation." -- Pepsi
"Feeling Free, Feeling Free, Join the ..... People." -- Pepsi
"Everybody Needs ....." -- Milk
"..... is a natural." -- Milk
"My Back to Nature Cereal." -- Grape Nuts
"It's Grr-r-r-eat." -- Frosted Flakes
SNAP, CRACKLE, POP -- Rice Krispies
"It's a Man's Cereal." -- Wheaties
"Melts in Your Mouth; Not in Your Hand." -- M and M's
"I bet you can't eat just one." -- Lay's Potato Chips
"Other potato chips just don't stack up." -- Pringles
"The Un-Cola." -- 7-Up
"The Peanuttiest Peanut Butter." -- Jiff
"It sure doesn't taste like tomato juice." -- V-8 Juice
"The Slow Ketchup." -- Heinz
"Um-mmm-m Good." -- Campbells Soups
"Come to the Florida Sunshine Tree." -- Orange Juice
"Can you say it five times fast?" -- Libby's Fruit Float
"Sorry Charlie, Starkist wants only the best tasting ...." -- Tuna
"Fills you up not out." -- Grape Nuts
"It's Time to Get Back Into Things." -- Special K
"The Taste That Beats the Others Cold." -- Pepsi
"When it Rains it Pours." -- Morton's Salt
"The Fresh Guys." -- Wonder Bread

"From the Valley of the Jolly, Ho, Ho, Ho, ..., ..." -- Green Giant Canned Foods
"America Loves What the Colonel Cooks." -- Kentucky Fried Chicken
"You deserve a break today." -- McDonald's
"You, you're the one. You are the only reason." -- McDonald's
"It's the richest kind." -- Folger's Coffee
"It's mountain grown." -- Folger's Coffee
"From Contented Cows." -- Carnation Milk
"Something Special to Eat; Nothing Much to Clean Up." -- Snackin' Cake
"There's Always Room for ...." -- Jell-O
"You Can Share Half and Still Have a Whole." -- Almond Joy
"It's the Sensible Drink." -- Hi-C
"Follow your nose." -- Fruit Loops
"Creammy, creammy caramel bar ." -- $100,000 Candy Bar

CONCEPT: Preparing foods in different ways

GENERALIZATION: Many foods can be prepared in several different ways which add variety to meals and snacks.

BEHAVIORAL OBJECTIVE: The students will taste a selected food prepared in more than one form.

* *

--Recipes (attached)

--Lead a class discussion on favorite ways of eating apples and carrots. Direct the students in preparing the selected recipes.

--Prepare and taste foods that are eaten in a variety of forms.

RECIPES FOR PREPARING FOODS IN SEVERAL WAYS

APPLESAUCE

EQUIPMENT	FOOD
Cutting boards	3 cooking apples
Paring knives	¼ cup sugar
Measuring spoons	1/8 to 1/4 teaspoon cinnamon
Stirring spoon	
Saucepan	
Heating unit	

Peal and quarter apples. Put into saucepan with enough water to prevent scorching. Add cinnamon.
Cook slowly until tender. Add sugar after apples are soft. If a smoother consistency is desired the applesauce may be put through a sieve.

HAROSET - 8 Small Servings

Passover treats. Good anytime. A perfect introduction to the use of a grater.

EQUIPMENT	FOOD
Bowl	3 apples
Grater	¼ cup honey
Knife	½ cup nuts finely chopped
Nut chopper	½ teaspoon cinnamon
Measuring cups and spoons	

Peel and grate apples, chop nuts until very fine, mix with other ingredients. Serve cold.

CARROT RELISHES

EQUIPMENT	FOOD
Vegetable peeler	½ carrot per student
Knives	
Cutting board	

Cut carrots in sticks.
Use a peeler and make very thin strips.
Roll the strips and put a toothpick through the roll and chill in cold water.
Remove the toothpick before serving.
Cut carrots in slices, like coins.

SHREDDED FRIED CARROTS

EQUIPMENT	FOOD
Electric frying pan	½ carrot per child
(or saucepan and heating unit)	Butter
Cutting board, sharp knife	Salt
Several vegetable brushes	Pepper
Several food graters	
Wax paper	

Scrub carrots. Grate carrots onto wax paper.
Melt butter in frying pan, add the carrots, salt and pepper.
Cook until tender but not mushy.
Stir frequently while cooking.
Serve hot.

CONCEPT: Family food traditions

GENERALIZATION: Specific foods, methods of preparation, and serving have symbolic meanings demonstrated in family traditions.

BEHAVIORAL OBJECTIVE: The student will identify family food traditions.

* *

--Pictures representing holidays (attached)
Slip of paper for each student

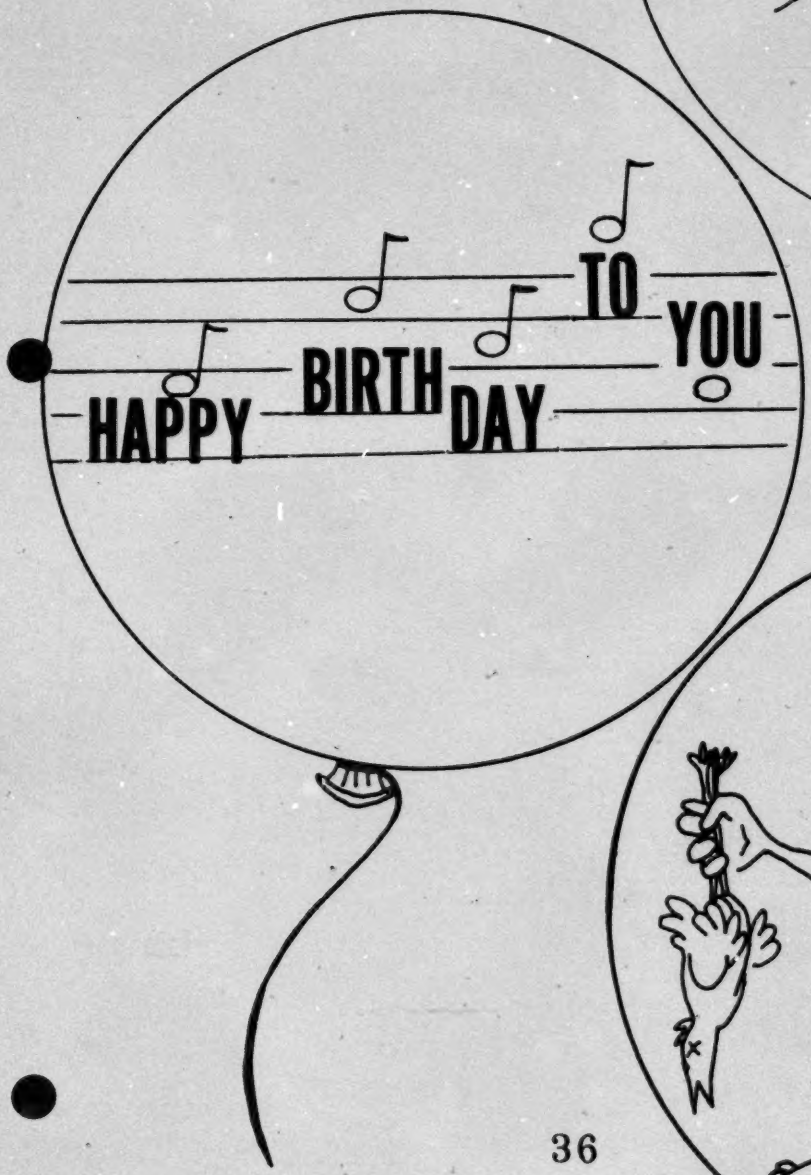
--Ask the students if their family has celebrated a birthday or a holiday lately. Talk about how the occasion was celebrated (favors, food, presents, etc.). Is it always celebrated this way?

Show the pictures, one at a time. Give each child a piece of paper and ask them to write a special food they commonly eat for each holiday on the paper. Collect the papers and attach them to the pictures. Note the most frequently eaten foods for each holiday. Describe these foods as to color, flavor, smell and taste.

--Name foods eaten on the holidays.

ADDITIONAL ACTIVITY: Think of another holiday you would like to celebrate. Write a "funny menu" for this holiday.

CHRISTMAS



THANKSGIVING

CONCEPT: Accessibility of food affects food choices

GENERALIZATION: Nutritious breakfasts using readily available foods can be prepared by those with limited food preparation skills.

BEHAVIORAL OBJECTIVE: Using foods from each of the four food groups, the student will prepare a breakfast.

* *

--Paper tablecloth
Triple Decker Breakfast (recipe attached)

--*HOW TO HAVE FUN COOKING BREAKFAST*
Editors of Creative
Creative Education Society
Mankato, MN 56001

--Duplicate Triple Decker Breakfast recipe.

Divide tablecloth in quarters by drawing heavy lines or using colored tape.

Place one of the sandwich ingredients in each of the three sections of the tablecloth. Place a carton of milk in the fourth section.

Ask the students if they sometimes make their own breakfast. Ask them to name some foods they eat for breakfast. If a peanut butter sandwich is not mentioned, ask if it would be a good food to eat for breakfast. Why? Why not? Tell the students they can fix a nutritious breakfast very easily using foods available at home.

Show them the foods on the tablecloth. Tell them these are the ingredients for a nutritious breakfast they can make for themselves.

Ask why the foods are each in a separate section on the tablecloth. (Putting foods in four groups makes it easier to remember the foods needed for nutritious meals.)

Direct students in making Triple Decker Breakfasts.

--Take part in breakfast discussion.
Prepare Triple Decker Breakfast.

ADDITIONAL ACTIVITY: Make up a recipe for a club sandwich.

TRIPLE DECKER BREAKFAST -- Each sandwich serves 2

EQUIPMENT	FOOD
Cutting knife	2 tablespoons peanut butter
Table knife	1 tablespoon strawberry preserves
Measuring spoon	3 slices of bread (mixture of
Napkins	light and dark)
Rubber spatula	

Measure 2 tablespoons of peanut butter. This amount of peanut butter has protein equal to that of 1 ounce of meat. Spread the peanut butter on one slice of bread.

Put the second slice of bread over the peanut butter.

Spread strawberry preserves on one side of the sandwich. Cover the preserves with the third slice of bread.

Cut sandwich in half.

TRIPLE DECKER BREAKFAST